Search History

DATE: Wednesday, February 04, 2004 Printable Copy Create Case

Set Name side by	Query	Hit Count	Set Name result set
side			
DB=PC	GPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, PLUR=YES, OP=AB, OP=AB	DJ	
<u>L5</u>	L4 and clean\$	297	<u>L5</u>
<u>L4</u>	emulsion same azeotrop\$	1600	<u>L4</u>
<u>L3</u>	dipropyleneglycol with ((monopropyl ether) or (mono n propyl ether))	18	<u>L3</u>
<u>L2</u>	L1 and 134/\$.ccls.	70	<u>L2</u>
<u>L1</u>	(monopropyl ether) or (mono n propyl ether)	2129	<u>L1</u>

END OF SEARCH HISTORY

Refine Search

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Term	Documents
CLEAN\$	0
CLEAN	582747
CLEANA	30
CLEANABFFITY	1
CLEANABFLITY	1
CLEANABFLITY:	1
CLEANABI	2
CLEANABIC	1
CLEANABIE	4
CLEANABIHTY	1
CLEANABIILTY	1
(L4 AND CLEAN\$).PGPB,USPT,USOC,ÉPAB,JPAB,DWPI,TDBD.	297

There are more results than shown above. Click here to view the entire set.

Database:	US Pre-Grant Publication Full-Text Database US Patents Full-Text Database US OCR Full-Text Database EPO Abstracts Database JPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins		
Search:	L5	A	Refine Search
	Recall Text Clear		Interrupt

WEST Search History

Hide Items	Restore	Clear	Cancel
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DATE: Wednesday, February 04, 2004

Hide?	Set Name	Query	Hit Count
	DB=PGPB, Q	USPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR = 0	YES; OP=ADJ
	L14	L13 and clean\$.ti.	19
	L13	L12 and azeotrop\$ and \$emulsion	2248
	L12	\$glycol with ether	148459
	DB=USPT;	PLUR=YES; OP=ADJ	
	L11 ·	5415811.pn.	.1
	L10	5486314.pn.	1
	DB=PGPB,	USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=	YES; OP=ADJ
· 🛄	L9	6-146041	3
	DB=USPT;	PLUR=YES; OP=ADJ	
. 🗖	L8	5271773.pn.	1
	L7	5300154.pn.	1
	DB=PGPB,	$USPT, USOC, EPAB, JPAB, DWPI, TDBD; \ PLUR=$	=YES; OP=ADJ
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	DB = USPT;	PLUR=YES; OP=ADJ	,
) - 100 mg	L5	5300154.pn.	1
. 🗔	L4	5271773.pn.	1 .
	L3	US-5876510-A.did.	1
	L2	US-5876510-A.did.	1
	DB=DWPI;	PLUR=YES; OP=ADJ	
	L1	1996wo-us02900	1

END OF SEARCH HISTORY

First Hit

Generate Collection Print

L2: Entry 1 of 70

File: PGPB

Sep 11, 2003

DOCUMENT-IDENTIFIER: US 20030168079 A1

TITLE: Cleaning agent, cleaning method and cleaning apparatus

<u>Current US Classification</u>, <u>US Primary Class/Subclass</u>: 134/11

<u>Current US Classification, US Secondary Class/Subclass:</u> 134/105

<u>Current US Classification, US Secondary Class/Subclass</u>: 134/110

<u>Current US Classification</u>, <u>US Secondary Class/Subclass</u>: 134/13

<u>Current US Classification</u>, <u>US Secondary Class/Subclass:</u> 134/26

Current US Classification, US Secondary Class/Subclass: 134/30

Summary of Invention Paragraph:

[0030] The 14th aspect of the present invention provides the cleaning agent having no flash point or the rinsing agent having no flash point according to the 9th aspect of the present invention, wherein the component (b1) comprises at least one selected from 3-methoxybutanol, 3-methyl-3-methoxybutanol, dipropylene glycol mono-n-propyl ether and dipropylene glycol mono-n-butyl ether.

Detail Description Paragraph:

[0107] With respect to the (b1) glycol ether monoalkyl ethers, specific examples of the hydrophilic glycol ether monoalkyl ethers are diethylene glycol monomethyl ether, diethylene glycol monoethyl ether, diethylene glycol mono-i-propyl ether, diethylene glycol mono-n-butyl ether, propylene glycol monomethyl ether, dipropylene glycol monomethyl ether, 3-methoxybutanol and 3-methyl-3-methoxybutanol. Specific examples of the hydrophobic glycol ether monoalkyl ethers are ethylene glycol mono-n-hexyl ether, propylene glycol mono-n-butyl ether, dipropylene glycol mono-n-propyl ether and dipropylene glycol mono-n-butyl ether. Incidentally, dipropylene glycol mono-n-propyl ether and dipropylene glycol mono-n-butyl ether are superior in cleaning property to soil of amine hydrochlorides and organic acids, which cause an ionic residue in a flux cleaning, and soil of polymer rosin and rosin metal

salts, which are produced in a soldering step and cause a white residue.

Detail Description Paragraph:

[0114] As the glycol ethers used in the present invention, more preferred from a viewpoint of low toxicity are dipropylene glycol monomethyl ether, dipropylene glycol mono-n-propyl ether, dipropylene glycol mono-n-butyl ether, dipropylene glycol dimethyl ether, 3-methoxybutanol and 3-methyl-3-methoxybutanol, which produce no alkoxyacetic acid during metabolism in a human body.

Detail Description Paragraph:

[0118] As the glycol ether acetates used in the present invention, more preferred from a viewpoint of low toxicity are dipropylene glycol monomethyl ether acetate, dipropylene glycol mono-n-propyl ether acetate, dipropylene glycol mono-n-butyl ether acetate, 3-methoxybutyl acetate and 3-methyl-3-methoxybutyl acetate, which produce no alkoxyacetic acid during metabolism in a human body.

Detail Description Table CWU:

Z TABLE 2 Comparative Example Component (parts by weight) 1 2 3 4 5 6 7 8 9 10 11 12 Component al A mixture of methyl perfluorobutyl -- -- -- -- -- -- -- -- -- 96 95 -- ether and methyl perfluoroisobutyl ether (commercial name of HFE7100, manufactured by Sumitoim 3M Limited) 4H,5H,5H-Perfluorocyclopentane -- -- -- -- 98 (commercial name, Zeorora H manufactured by Nippon Zeon Co., Ltd.) Component a2 Ethanol 100 -- -- -- -- -- -- -- -- 100 -- -- -- -- -- -- 2 i-Propanol -- 100 -- -- -- -- -- -- -- -- -- -- -- 100 -- -- -- -- -- 100 -- -- -- -- -- -- -- Dipropylene glycol mono-n-propyl ether -- -- -- 100 -- -- -- -- -- -- -- -- Dipropylene glycol n-butyl ether -- -- -- -- 100 -- -- -- -- -- -- 3-Methyl-3-methoxylbutyl acetate -- -- -- -- -- 100 -- -- -- Butyl lactate -- -- -- -- -- 100 -- -- -- -- Butyl lactate -- -- -- -- -- -- 100 -- -- -- -- Butyl

Detail Description Table CWU:

3 TABLE 3 Comparative Example Example Component (parts by weight) 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 13 14 15 Component al 4H,5H,5H-Perfluorccyclopentane -- -- -- 60 60 70 -- -- 15 45 -- -- -- 100. -- -- (commercial name, Zeorora H manufac- tured by Nippon Zeon Co., Ltd.) A mixture of methyl perfluorobutyl 60 50 60 60 -- -- 45 68 60 54 15 -- 50 50 66~60 -- 100 -- ether and methyl perfluoroisobutyl ether (commercial name of HFE7100, manufactured by Sumitomo 3M Limited) 2H,3H-Perfluoropentane (commercial -- -- -- 100 name of VERTREL XF, manufactured by Mitsu Dupon Fluorochemical) Component a2 Ethanol -- -- -- -- -- -- 2 -- 1 -- -- -- 4 4 -- -- -- Component b Component b1 Hydro-philic Diethylene glycol mono-n-butyl ether -- -- -- ---- 10 -- -- -- 20 -- -- -- 3-Methyl-3-methoxybutanol 40 ---- -- 20 -- -- 36 -- -- -- -- 30 20 -- -- -- Dipropylene glycol Hydro-Phobic Diethylene glycol mono-n-propyl ether -- -- -- -- -- -- -- --15 -- 20 -- -- -- 16 -- -- Diethylene glycol mono-n-butyl ether -- --- -- -- 20 -- -- 20 -- 10 -- -- -- '10 -- -- -- Component b2 hydrophilic Diethylene glycol di-n-butyl ether -- -- 40 -- -- 20 -- -- 25 -- --

```
20 -- 20 -- -- -- Dipropylene glycol dimethyl ether -- -- -- -- --
- 19 -- -- 20 -- -- -- 20 -- -- 3-Methyl-3-methoxylbutyl acetate --
-- -- -- Butyl lactate -- --
-- 40 -- -- -- Component c 2,6-Di-t-
butyl-p-cresol -- -- -- -- -- -- 0.05 0.05 -- -- -- -- -- --
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.circleincircle. .circleincircle. .circleincircle. .circleincircle.
.circleincircle. X X X
```

CLAIMS:

14. The cleaning agent having no flash point or the rinsing agent having no flash point according to claim 9, wherein the component (b1) contains at least one selected from 3-methoxybutanol, 3-methyl-3-methoxybutanol, dipropylene glycol mono-n-propyl ether and dipropylene glycol mono-n-butyl ether.

Hit List

Clear Generate Collection Print Fwd Refs Bkwd Refs
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Search Results - Record(s) 1 through 15 of 70 returned.

1. Document ID: US 20030168079 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 70

File: PGPB

Sep 11, 2003

Jun 5, 2003

PGPUB-DOCUMENT-NUMBER: 20030168079

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030168079 A1

TITLE: Cleaning agent, cleaning method and cleaning apparatus

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Kabashima, Kazuo Yokohama-shi JP Kato, Kenichi Kawasaki-shi JP

Matsumoto, Shoji Tokyo JP

US-CL-CURRENT: <u>134/11</u>; <u>134/105</u>, <u>134/110</u>, <u>134/13</u>, <u>134/26</u>, <u>134/30</u>, <u>510/365</u>, 510/407, <u>510/417</u>

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC
				***************************************				••••		***************************************	
	2.	Docume	nt ID:	US 200	030102011	A1					

File: PGPB

PGPUB-DOCUMENT-NUMBER: 20030102011

PGPUB-FILING-TYPE: new

L2: Entry 2 of 70

DOCUMENT-IDENTIFIER: US 20030102011 A1

TITLE: Method of removing material from an interior surface using core/shell particles

PUBLICATION-DATE: June 5, 2003

INVENTOR-INFORMATION:

NAME

CITY

COUNTRY STATE

RULE-47

Smith, Dennis E.

Rochester

US

US

Puccini, Christopher J.

Rochester

NY

NY

Gruszczynski, David W.

Webster

NY US

US-CL-CURRENT: 134/8

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims

3. Document ID: US 20030040456 A1

L2: Entry 3 of 70

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030040456

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030040456 A1

TITLE: Method and apparatus for cleaning article

PUBLICATION-DATE: February 27, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE COUNTRY RULE-47

Imai, Tetsuo

Tokiyama-shi Yamaguchi

JΡ

Nakashima, Masaaki

Tokuyama-shi Yamaguchi

JΡ

US-CL-CURRENT: 510/417; 134/26, 134/61, 510/506

Full Title Citation Front Review Classification Date Reference Sequences Attachments

4. Document ID: US 20020189644 A1

L2: Entry 4 of 70

File: PGPB

Dec 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020189644

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020189644 A1

TITLE: Method for the liquid cleaning of objects

PUBLICATION-DATE: December 19, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Wack, Oskar

Ingolstadt

DE

US-CL-CURRENT: <u>134/10</u>; <u>134/26</u>, <u>134/34</u>

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC

5. Document ID: US 6569251 B1

L2: Entry 5 of 70

File: USPT

May 27, 2003

US-PAT-NO: 6569251

DOCUMENT-IDENTIFIER: US 6569251 B1

TITLE: Detergent for lithography

DATE-ISSUED: May 27, 2003

INVENTOR-INFORMATION:

NAME C:

CITY

STATE ZIP CODE

COUNTRY

Takeda; Takashi

Ogasa-gun

JΡ

US-CL-CURRENT: <u>134/2</u>; <u>257/E21.255</u>, <u>510/108</u>, <u>510/169</u>, <u>510/171</u>, <u>510/201</u>, 510/407, 510/505

Full Title Citation Front Review Classification Date Reference Security Accomples Claims KMC

6. Document ID: US 6506261 B1

L2: Entry 6 of 70

File: USPT

Jan 14, 2003

US-PAT-NO: 6506261

DOCUMENT-IDENTIFIER: US 6506261 B1

TITLE: Detergent compositions for the removal of complex organic or greasy

soils

DATE-ISSUED: January 14, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

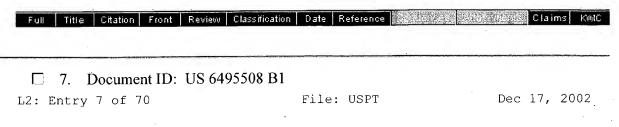
COUNTRY

Man; Victor F.

St. Paul

MN

US-CL-CURRENT: 134/39; 134/25.2, 510/222, 510/223, 510/225, 510/228, 510/229, 510/422, 510/424, 510/466, 510/506



US-PAT-NO: 6495508

DOCUMENT-IDENTIFIER: US 6495508 B1

TITLÈ: Cleaning wipe

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Leonard; Isabelle Voroux-lez-Liers BE
Dormal; Didier Aywaille BE
Julemont; Jean Verviers BE

US-CL-CURRENT: 510/438; 134/42, 15/209.1, 510/295, 510/439, 510/499, 510/505, 510/506

Full Title Citation Front Review Classification Date Reference September 1997 (1997)

8. Document ID: US 6454876 B1

L2: Entry 8 of 70

File: USPT

Sép 24, 2002

US-PAT-NO: 6454876

DOCUMENT-IDENTIFIER: US 6454876 B1

TITLE: Method for eliminating malodors

DATE-ISSUED: September 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP C	CODE	COUNTRY
Ochomogo; Maria G.	Danville	CA			
Adair; Martha J.	San Ramon .	CA			
Ali; Sheila E.	San Ramon	ĊA			
Finn; Leslie E.	Pleasanton	CA			
Peterson; David	Pleasanton	CA			
Piche; Gregory M.	Dublin	CA			
Van Buskirk; Gregory	Danville	CA			

US-CL-CURRENT: <u>134/42</u>; <u>252/8.91</u>, <u>424/76.4</u>, <u>510/276</u>, <u>510/278</u>, <u>510/279</u>, 510/477, 8/137.<u>5</u>

Full Title Citation Front Review Classification Date Reference Citation Statements Claims KWIC

9. Document ID: US 6436892 B1

L2: Entry 9 of 70

File: USPT

Aug 20, 2002

US-PAT-NO: 6436892

DOCUMENT-IDENTIFIER: US 6436892 B1

TITLE: Cleaning wipe comprising 2 bromo-2 nitropropane-1,3 diol

DATE-ISSUED: August 20, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Leonard; Isabelle Voroux-lez-Liers BE
Dormal; Didier Aywaille BE
Julemont; Jean Verviers BE

US-CL-CURRENT: 510/438; 134/42, 15/209.1, 510/295, 510/439, 510/499, 510/505, 510/506

<u>510/506</u>

Full | Title | Citation | Front | Review | Classification | Date | Reference | Section | Section | Section | Claims | KWIC

☐ 10. Document ID: US 6432897 B1

L2: Entry 10 of 70

File: USPT

Aug 13, 2002

US-PAT-NO: 6432897

DOCUMENT-IDENTIFIER: US 6432897 B1

TITLE: Reduced residue hard surface cleaner

DATE-ISSUED: August 13, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Cable; Elizabeth A. Livermore CA

US-CL-CURRENT: 510/182; 134/40, 510/365, 510/421, 510/424, 510/432, 510/506



11. Document ID: US 6423150 B1

L2: Entry 11 of 70

File: USPT

Jul 23, 2002

US-PAT-NO: 6423150

DOCUMENT-IDENTIFIER: US 6423150 B1

TITLE: Method for removing resin

DATE-ISSUED: July 23, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Nakayama; Yasuharu

Kanaqawa

JP.

US-CL-CURRENT: <u>134/10</u>; <u>134/28</u>, <u>134/3</u>, <u>134/38</u>, <u>430/281.1</u>

Full	Title	Citation	Front	Review	Classification	Date	Reference	Signatures Sections	Claims	KOME

☐ 12. Document ID: US 6399555 B2

L2: Entry 12 of 70

File: USPT

Jun 4, 2002

COUNTRY

DE

US-PAT-NO: 6399555

DOCUMENT-IDENTIFIER: US 6399555 B2

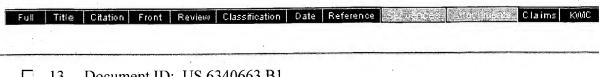
TITLE: Low odor, hard surface cleaner with enhanced soil removal

DATE-ISSUED: June 4, 2002

INVENTOR-INFORMATION:

STATE ZIP CODE NAME CITY Robbins; Michael H. Hilden Julian; Jennifer C. Castro Valley CA CA Thompson; Suzanne M. Oakland Robinson; Gary L. Livermore CACAChoy; Clement K. Alamo Gossett; Elizabeth A. CA Livermore

US-CL-CURRENT: $\underline{510/238}$; $\underline{134/40}$, $\underline{134/42}$, $\underline{510/191}$, $\underline{510/421}$, $\underline{510/422}$, $\underline{510/423}$, $\underline{510/426}$, $\underline{510/427}$, $\underline{510/432}$, $\underline{510/434}$, $\underline{510/499}$, $\underline{510/506}$



☐ 13. Document ID: US 6340663 B1

L2: Entry 13 of 70

File: USPT

Jan 22, 2002

Nov 13, 2001

US-PAT-NO: 6340663

DOCUMENT-IDENTIFIER: US 6340663 B1

TITLE: Cleaning wipes

DATE-ISSUED: January 22, 2002

INVENTOR-INFORMATION:

STATE ZIP CODE COUNTRY NAME CITY Deleo; Malcolm A. Castro Valley CA CA Blum; Robert L. Clayton CA

Ochomogo; Maria G. Danville Pappalardo; Paul A. Livermore CA CA Swayne; Elizabeth N. Livermore

US-CL-CURRENT: 510/438; 134/42, 510/108, 510/238, 510/439, 510/470, 510/475, 510/477

File: USPT

US-PAT-NO: 6315835

L2: Entry 14 of 70

DOCUMENT-IDENTIFIER: US 6315835 B1

TITLE: Anti-spotting and anti-filming hard surface cleaning formulations and methods

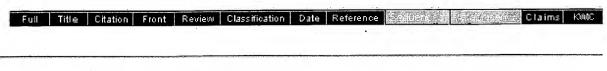
DATE-ISSUED: November 13, 2001

INVENTOR-INFORMATION:

COUNTRY STATE ZIP CODE CITY NAME Kerobo; Charles O. Southfield ΙM· Welch; Michael C. Woodhaven MΙ Flanders Holland; Richard J. NJ Detroit Patterson; Sonia J. MΙ

Gessner; Suzanne M. Ypsilanti

US-CL-CURRENT: 134/3; 134/2, 134/22.19, 134/26, 134/34, 134/36, 134/41, 134/42, 510/108, 510/180, 510/238, 510/245, 510/254, 510/434, 510/475, 510/477



☐ 15. Document ID: US 6309471 B1

L2: Entry 15 of 70

File: USPT

oct 30, 2001

US-PAT-NO: 6309471

DOCUMENT-IDENTIFIER: US 6309471 B1

** See image for Certificate of Correction **

TITLE: Rapid removal of iodine stains

DATE-ISSUED: October 30, 2001

INVENTOR-INFORMATION:

NAME .

CITY

STATE

COUNTRY

ZIP CODE

Smith; Kim R.

Woodbury

MN

Hei; Robert D. P.

Baldwin

Full Title Citation Front Review Classification Date Reference

WI

Levitt; Mark

St. Paul

MN

US-CL-CURRENT: 134/28; 134/2, 134/3, 134/36, 134/41, 134/42, 510/109, <u>510/214, 510/238, 510/278, 510/281, 510/405</u>

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Term					Do	cuments
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134/10						1341
'134/100.1	11					347
"134/102.1	II .					790

"134/102.2"	284
"134/102.3"	167
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"134/103.2"	492
"134/103.3"	89
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